



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2018-0408; Product Identifier 2017-NM-146-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede Airworthiness Directive (AD) 2016-13-16, which applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. AD 2016-13-16 requires an inspection or records check to determine if affected horizontal stabilizers are installed, related investigative actions, and, for affected horizontal stabilizers, repetitive inspections for any crack of the horizontal stabilizer rear spar upper chord, and corrective action if necessary. Since we issued AD 2016-13-16, we have determined that clarification of inspection areas and serial number information of the horizontal stabilizer is necessary. Therefore, this proposed AD would retain the requirements of AD 2016-13-16, with revised service information that clarifies the inspection areas and serial number information of the horizontal stabilizer. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0408.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0408; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Lu Lu, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3525; email: [lu.lu@faa.gov](mailto:lu.lu@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2018-0408; Product Identifier 2017-NM-146-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We issued AD 2016-13-16, Amendment 39-18581 (81 FR 44503, July 8, 2016) (“AD 2016-13-16”), for all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. AD 2016-13-16 requires an identification plate inspection or records check to determine if affected horizontal stabilizers are installed, related investigative actions, and for affected horizontal stabilizers, repetitive inspections for any crack of the horizontal stabilizer rear spar upper chord, and corrective action if necessary. AD 2016-13-16 resulted from reports of a manufacturing oversight, in which a supplier omitted the required protective finish on certain bushings installed in the rear spar upper chord on horizontal stabilizers, which could lead to galvanic corrosion and consequent cracking of the rear spar upper chord. We issued AD 2016-13-16 to address cracking of the rear spar upper chord, which can result in the failure of the upper chord,

consequent departure of the horizontal stabilizer from the airplane, and loss of control of the airplane.

#### **Actions Since AD 2016-13-16 Was Issued**

Since we issued AD 2016-13-16, it has been determined that clarification of inspection areas and serial number information of the horizontal stabilizer is necessary. Therefore, the service information has been revised to clarify the inspection areas for cracking and serial number information of the horizontal stabilizer.

#### **Related Service Information under 1 CFR part 51**

We reviewed Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017. This service information describes procedures for an identification plate inspection or records check to determine whether affected horizontal stabilizers are installed, related investigative actions, and for affected horizontal stabilizers, repetitive high frequency eddy current (HFEC) inspections for any crack of the horizontal stabilizer rear spar upper chord, and corrective action. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### **Proposed AD Requirements**

Although this proposed AD does not explicitly restate the requirements of AD 2016-13-16, this proposed AD would retain all requirements of AD 2016-13-16. Those requirements are referenced in the service information identified previously, which, in turn, is referenced in paragraph (g) of this proposed AD. This proposed AD would clarify the inspection areas and serial number information of the horizontal

stabilizer. This proposed AD would also require accomplishment of the actions identified as “RC” (required for compliance) in the Accomplishment Instructions of Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017, described previously.

For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0408.

### **Costs of Compliance**

We estimate that this proposed AD affects 1,748 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspection or records check to determine the serial number of the horizontal stabilizer	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$148,580
HFEC inspection	6 work-hour X \$85 per hour = \$510	\$0	\$510	\$891,480

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed AD.

According to the manufacturer, all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all available costs in our cost estimate.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

## **Regulatory Findings**

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2016-13-16, Amendment 39-18581 (81 FR 44503, July 8, 2016), and adding the following new AD:

**The Boeing Company:** Docket No. FAA-2018-0408; Product Identifier 2017-NM-146-AD.

#### **(a) Comments Due Date**

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD replaces AD 2016-13-16, Amendment 39-18581 (81 FR 44503, July 8, 2016) (“AD 2016-13-16”).

**(c) Applicability**

This AD applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and 900ER series airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 55, Stabilizers.

**(e) Unsafe Condition**

This AD was prompted by reports of a manufacturing oversight, in which a supplier omitted the required protective finish on certain bushings installed in the rear spar upper chord on horizontal stabilizers, which could lead to galvanic corrosion and consequent cracking of the rear spar upper chord. We are issuing this AD to address cracking of the rear spar upper chord, which could result in the failure of the upper chord, consequent departure of the horizontal stabilizer from the airplane, and loss of control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

Except as required by paragraph (h) of this AD: At the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017.

**(h) Exceptions to Service Information**

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017, uses the phrase “the Revision 1 date of this service bulletin,” this AD requires using “the effective date of this AD.”



(2) Where Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017, specifies contacting Boeing, and specifies that action as RC: This AD requires repair using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

**(i) Parts Installation Limitations**

As of the effective date of this AD, no person may install a horizontal stabilizer on any airplane, except as specified in paragraphs (i)(1) or (i)(2) of this AD.

(1) A horizontal stabilizer may be installed if the part is inspected in accordance with “Part 2: Horizontal Stabilizer Identification Plate Inspection” of the Accomplishments Instructions of Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017, and no affected serial number is found.

(2) A horizontal stabilizer may be installed if the part is inspected in accordance with “Part 2: Horizontal Stabilizer Identification Plate Inspection” of the Accomplishments Instructions of Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017, and an affected serial number is found, provided that the actions specified in paragraphs (i)(2)(i) and (i)(2)(ii) of this AD are done, as applicable.

(i) Initial and repetitive high frequency eddy current (HFEC) inspections, which are part of the required actions specified in paragraph (g) of this AD, are completed within the compliance times specified in paragraph (g) of this AD.

(ii) All applicable corrective actions, which are part of the required actions specified in paragraph (g) of this AD, are done within the compliance times specified in paragraph (g) of this AD.

**(j) Credit for Previous Actions**

For Groups 1 and 2, Configuration 1 airplanes, as identified in Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017: This paragraph

provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 737-55A1097, dated July 1, 2015.

**(k) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (l)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2016-13-16 are approved as AMOCs for the corresponding provisions of Boeing Alert Service Bulletin 737-55A1097, Revision 1, dated September 20, 2017, that are required by paragraph (g) of this AD.

(5) Except as required by paragraph (h)(2) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(5)(i) and (k)(5)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(l) Related Information**

(1) For more information about this AD, contact Lu Lu, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3525; email: lu.lu@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued in Des Moines, Washington, on May 7, 2018.

Michael Kaszycki,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.

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